

CLAIMS

1. A pharmaceutical composition comprising:
polyclonal antibodies directed against at least one enteric pathogen; and
a probiotic.
- 5 2. The pharmaceutical composition according to claim 1 wherein the
enteric pathogen is selected from the group consisting of: *Aeromonas hydrophilia*,
Bacillus cereus, *Vibrio parahemolyticus*, *Vibrio cholerae O1*, *Vibrio cholerae non-O1*, *Vibrio vulnificus*, *Salmonella enterica*, *Salmonella typhi*, *Salmonella paratyphi*,
Salmonella enteritidis, *Salmonella cholerasuis*, *Salmonella typhimurium*,
10 *Clostridium difficile*, *Clostridium botulinum*, *Clostridium perfringens*,
Staphylococcus aureus, *Escherichia coli* (ETEC, EPEC, EHEC, EggEC, UPEC
and EIEC), *Campylobacter jejuni*, *Campylobacter coli*, *Campylobacter lari*,
Campylobacter fetus, *Yersinia enterocolitica*, *Yersinia pestis*, *Yersinia pseudotuberculosis*, *Plesiomonas shigelloides*, *Listeria monocytogenes*, enteric
15 viruses, rotavirus, Norwalk-like viruses, enteric adenoviruses, coronavirus and all
other non-enveloped enteroviruses, and enteric parasites and fungi,
Cryptosporidium, and *Cyclospora*.
- 20 3. The pharmaceutical composition according to claim 1 wherein the
probiotic is selected from the group consisting of: Lactobacilli species,
Bifidobacteria species, Saccharomyces species, Enterococci species, Eubacteria
species and mixtures thereof.
4. The pharmaceutical composition according to claim 1 wherein the
polyclonal antibodies are egg yolk antibodies.
- 25 5. The pharmaceutical composition according to claim 1 including an
oligosaccharide.
6. The pharmaceutical composition according to claim 1 wherein the
pharmaceutical composition is microencapsulated.
- 30 7. The pharmaceutical composition according to claim 1 wherein the
polyclonal antibodies are raised against more than one antigen derived from the
enteric pathogen.
8. A method of preparing a pharmaceutical composition comprising:

admixing a polyclonal antibodies directed against at least one enteric pathogen; and a probiotic.

9. The method according to claim 8 wherein the enteric pathogen is selected from the group consisting of: *Aeromonas hydrophilia*, *Bacillus cereus*,
5 *Vibrio parahemolyticus*, *Vibrio cholerae* O1, *Vibrio cholerae* non-O1, *Vibrio vulnificus*, *Salmonella enterica*, *Salmonella typhi*, *Salmonella paratyphi*, *Salmonella enteritidis*, *Salmonella cholerasuis*, *Salmonella typhimurium*, *Clostridium difficile*, *Clostridium botulinum*, *Clostridium perfringens*, *Staphylococcus aureus*, *Escherichia coli* (ETEC, EPEC, EHEC, EaggEC, UPEC
10 and EIEC), *Campylobacter jejuni*, *Campylobacter coli*, *Campylobacter lari*, *Campylobacter fetus*, *Yersinia enterocolitica*, *Yersinia pestis*, *Yersinia pseudotuberculosis*, *Plesiomonas shigelloides*, *Listeria monocytogenes*, enteric viruses, rotavirus, Norwalk-like viruses, enteric adenoviruses, coronavirus and all other non-enveloped enteroviruses, and enteric parasites and fungi,
15 *Cryptosporidium*, and *Cyclospora*.

10. The method according to claim 8 wherein the probiotic is selected from the group consisting of: Lactobacilli species, Bifidobacteria species, Saccharomyces species, Enterococci species, Eubacteria species and mixtures thereof.

- 20 11. The method according to claim 8 wherein the polyclonal antibodies are egg yolk antibodies.

12. The method according to claim 8 including adding an oligosaccharide.

- 25 13. The method according to claim 8 including microencapsulating the pharmaceutical composition.

14. The method according to claim 8 wherein the polyclonal antibodies are raised against more than one antigen derived from the enteric pathogen.

- 30 15. A method of treating or preventing a gastrointestinal illness comprising administering to a patient in need thereof an effective dose of a pharmaceutical composition comprising:

polyclonal antibodies directed against at least one enteric pathogen; and

a probiotic.

16. The method according to claim 15 wherein the enteric pathogen is selected from the group consisting of: *Aeromonas hydrophilia*, *Bacillus cereus*, *Vibrio parahemolyticus*, *Vibrio cholerae* O1, *Vibrio cholerae* non-O1, *Vibrio vulnificus*, *Salmonella enterica*, *Salmonella typhi*, *Salmonella paratyphi*, *Salmonella enteritidis*, *Salmonella cholerasuis*, *Salmonella typhimurium*, *Clostridium difficile*, *Clostridium botulinum*, *Clostridium perfringens*, *Staphylococcus aureus*, *Escherichia coli* (ETEC, EPEC, EHEC, EggEC, UPEC and EIEC), *Campylobacter jejuni*, *Campylobacter coli*, *Campylobacter lari*, *Campylobacter fetus*, *Yersinia enterocolitica*, *Yersinia pestis*, *Yersinia pseudotuberculosis*, *Plesiomonas shigelloides*, *Listeria monocytogenes*, enteric viruses, rotavirus, Norwalk-like viruses, enteric adenoviruses, coronavirus and all other non-enveloped enteroviruses, and enteric parasites and fungi, *Cryptosporidium*, and *Cyclospora*.

15 17. The method according to claim 15 wherein the probiotic is selected from the group consisting of: Lactobacilli species, Bifidobacteria species, Saccharomyces species, Enterococci species, Eubacteria species and mixtures thereof.

20 18. The method according to claim 15 wherein the polyclonal antibodies are egg yolk antibodies.

19. The method according to claim 15 wherein the pharmaceutical composition includes an oligosaccharide.

20. The method according to claim 15 wherein the pharmaceutical composition is microencapsulated.

25 21. The method according to claim 15 wherein the polyclonal antibodies are raised against more than one antigen derived from the enteric pathogen.